NOTE

Investigating the Role of Fungal Entomopathogens in Whitefly Landscape IPM Programs

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The rugose spiraling whitefly, *Aleurodicus rugioperculatus* Martin, and Bondar’s nesting whitefly, *Paraleyrodes bondari* Perracchi, are two recently introduced whitefly species affecting several plant hosts in Florida. Native to Central America, rugose spiraling whitefly was first detected in the Continental United States from Miami–Dade County, FL, in 2009 (Stocks and Hodges 2012, Pest Alert, DACS-P-01745). Since then its distribution range has expanded rapidly, and it has become a serious pest in residential, commercial, and municipal landscapes (Kumar et al. 2013, http://edis.ifas.ufl.edu/pdffiles/IN/IN101500.pdf). Rugose spiraling whitefly has been reported affecting more than 100 plant species (Stocks 2012, FDACS-DPI report. 6 p.) including landscape (coconut palm, black olive, gumbo limbo, weeping fig, live oak, rose, and sabal palm), agriculture (citrus, mango, avocado, and sugarcane), and natural areas (sabal palm, live oak, coconut palm, Brazilian pepper, and Virginia creeper). This insect has the potential for spreading into the northern parts of the State and beyond. Rugose spiraling whitefly reproduces throughout the year with multiple, overlapping generations.

Endemic to Brazil, Bondar’s nesting whitefly was first reported from a ficus hedge in Lee County, FL, in 2011. Since then it has been found affecting at least five plant species in seven Florida counties (Stocks 2012, FDACS-DPI report. 6 p.). Feeding by these whiteflies causes stress to host plants resulting in premature leaf drop. Furthermore, the excessive production of wax and honeydew creates an enormous nuisance in infested areas. Black sooty mold fungi can then grow on the honeydew, reducing aesthetics of plants in the landscape.